WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels;

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a liquid crystal element portion,

wherein the signal line driver circuit outputs a timing signal to the output switching circuit, and

wherein the output switching circuit outputs different signals to the sensor portion and to the liquid crystal element portion.

2. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels;

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a light emitting element portion,

wherein the output switching circuit comprises a first logical circuit and a second logical circuit,

wherein the signal line driver circuit outputs a timing signal to the first logical circuit and to the second logical circuit,

wherein one of the first logical circuit and the second logical circuit outputs a first signal to the sensor portion, and the other outputs a second signal to the light emitting element portion, and

wherein the first signal is different from the second signal.

3. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels;

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a liquid crystal element portion,

wherein the output switching circuit comprises a first logical circuit and a second logical circuit,

wherein the signal line driver circuit outputs a timing signal to the first logical circuit and to the second logical circuit,

wherein one of the first logical circuit and the second logical circuit outputs a first signal to the sensor portion, and the other outputs a second signal to the liquid crystal element portion, and

wherein the first signal is different from the second signal.

4. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels;

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a light emitting element portion,

wherein the sensor portion comprises a first TFT, and the light emitting element portion comprises a second TFT,

wherein the output switching circuit comprises a first logical circuit and a second logical circuit;

wherein the first TFT is connected to one of the first logical circuit and the second circuit, and the second TFT is connected to the other,

wherein the signal line driver circuit outputs a timing signal to the first logical circuit and to the second logical circuit,

wherein one of the first logical circuit and the second logical circuit outputs a first signal to the first TFT, and the other outputs a second signal to the second TFT, and

wherein the first signal is different from the second signal.

5. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels;

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a liquid crystal element portion,

wherein the sensor portion comprises a first TFT, and the liquid crystal element portion comprises a second TFT,

wherein the output switching circuit comprises a first logical circuit and a second logical circuit;

wherein the first TFT is connected to one of the first logical circuit and the second circuit, and the second TFT is connected to the other,

wherein the signal line driver circuit outputs a timing signal to the first logical circuit and to the second logical circuit,

wherein one of the first logical circuit and the second logical circuit outputs a first signal to the first TFT, and the other outputs a second signal to the second TFT, and

wherein the first signal is different from the second signal.

6. A semiconductor device comprising:

a pixel portion having a plurality of pixels;

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a light emitting element portion,

wherein the sensor portion comprises a first TFT, and the light emitting element portion comprises a second TFT,

wherein the output switching circuit comprises a first logical circuit and a second logical circuit,

wherein an image signal generated by the sensor portion is input to the light emitting element portion,

wherein one of the first logical circuit and the second circuit outputs an off signal to the first signal line, and the other outputs a pulse signal to the second signal line, and

wherein the first signal line outputs the off signal to the first TFT, and the second signal line outputs the pulse signal to the second TFT.

7. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels;

a signal line driver circuit;

an output switching circuit; and

one of a back light and a front light,

wherein each of the plurality of pixels comprises a sensor portion and a liquid crystal element portion,

wherein the sensor portion comprises a first TFT, and the liquid crystal element portion comprises a second TFT,

wherein the output switching circuit comprises a first logical circuit and a second logical circuit,

wherein a first signal line is connected to one of the first logical circuit and the second logical circuit, and a second signal line is connected to the other,

wherein the first TFT is connected to the first signal line, and the second TFT is connected to the second signal line,

wherein the signal line driver circuit outputs a timing signal to the first logical circuit and to the second logical circuit,

wherein an image signal generated by the sensor portion is input to the light emitting element portion,

wherein one of the first logical circuit and the second logical circuit outputs an off signal to the first signal line, and the other outputs a pulse signal to the second signal line, and

wherein the first signal line outputs the off signal to the first TFT, and wherein the second signal line outputs the pulse signal to the second TFT.

8. A semiconductor device according to claim 2, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is a NOR circuit.

9. A semiconductor device according to claim 3, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is a NOR circuit.

10. A semiconductor device according to claim 4, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is a NOR circuit.

11. A semiconductor device according to claim 5, wherein one of the first logical circuit and the second logical circuit is a NAND and the other is a NOR circuit.

12. A semiconductor device according to claim 6, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is a NOR circuit.

13. A semiconductor device according to claim 7, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is a NOR circuit.

14. A semiconductor device according to claim 2, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

15. A semiconductor device according to claim 3, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

16. A semiconductor device according to claim 4, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

17. A semiconductor device according to claim 5, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

18. A semiconductor device according to claim 6, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

19. A semiconductor device according to claim 7, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

20. A semiconductor device according to claim 2, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

21. A semiconductor device according to claim 3, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

22. A semiconductor device according to claim 4, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

23. A semiconductor device according to claim 5, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

24. A semiconductor device according to claim 6, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

25. A semiconductor device according to claim 7, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

26. A semiconductor device according to claim 2, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an OR circuit.

27. A semiconductor device according to claim 3, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an

OR circuit.

28. A semiconductor device according to claim 4, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an OR circuit.

29. A semiconductor device according to claim 5, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an OR circuit.

30. A semiconductor device according to claim 6, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an OR circuit.

31. A semiconductor device according to claim 7, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an OR circuit.

32. A semiconductor device according to claim 6, wherein one of the first signal line and the second signal line is a selection signal line, and the other is a sensor selection signal line.

33. A semiconductor device according to claim 6, wherein one of the first signal line and the second signal line is a reset signal line, and the other is a sensor reset signal line.

34. A semiconductor device according to claim 6, wherein one of the first signal line and the second signal line is a selection signal line, and the other is a sensor reset signal line.

35. A semiconductor device according to claim 6, wherein one of the first signal line and the second signal line is a reset signal line, and the other one is a sensor selection signal line.

36. A semiconductor device according to claim 7, wherein one of the first signal line and the second signal line is a liquid crystal selection signal line, and the other is a sensor selection signal line.

37. A semiconductor device according to claim 7, wherein one of the first signal line and the second signal line is a liquid crystal selection signal line, and the other is a sensor reset signal line.

38. A semiconductor device according to claim 4, wherein one of the first TFT and the second TFT is a selection TFT, and the other is a sensor selection TFT.

39. A semiconductor device according to claim 6, wherein one of the first TFT and the second TFT is a selection TFT, and the other is a sensor selection TFT.

40. A semiconductor device according to claim 4, wherein one of the first TFT and the second TFT is a selection TFT, and the other is a sensor reset TFT.

41. A semiconductor device according to claim 6, wherein one of the first TFT and the second TFT is a selection TFT, and the other is a sensor reset TFT.

42. A semiconductor device according to claim 4, wherein one of the first TFT and the second TFT is a reset TFT, and the other is a sensor reset TFT.

43. A semiconductor device according to claim 6, wherein one of the first TFT and the second TFT is a reset TFT, and the other is a sensor reset TFT.

44. A semiconductor device according to claim 4, wherein one of the first TFT and the second TFT is a reset TFT, and the other is a sensor selection TFT.

45. A semiconductor device according to claim 6, wherein one of the first TFT and the second TFT is a reset TFT, and the other is a sensor selection TFT.

46. A semiconductor device according to claim 5, wherein one of the first TFT and the second TFT is a liquid crystal selection TFT, and the other is a sensor selection TFT.

47. A semiconductor device according to claim 7, wherein one of the first TFT and the second TFT is a liquid crystal selection TFT, and the other is a sensor selection TFT.

48. A semiconductor device according to claim 5, wherein one of the first TFT and the second TFT is a liquid crystal selection TFT, and the other one is a sensor reset TFT.

49. A semiconductor device according to claim 7, wherein one of the first TFT and the second TFT is a liquid crystal selection TFT, and the other is a sensor reset TFT.

50. A semiconductor device according to claim 2, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

51. A semiconductor device according to claim 3, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

52. A semiconductor device according to claim 4, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

53. A semiconductor device according to claim 5, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

54. A semiconductor device according to claim 6, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

55. A semiconductor device according to claim 7, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

56. A semiconductor device according to claim 2, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

57. A semiconductor device according to claim 3, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

58. A semiconductor device according to claim 4, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

59. A semiconductor device according to claim 5, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

60. A semiconductor device according to claim 6, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

61. A semiconductor device according to claim 7, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

62. A semiconductor device according to claim 2, wherein each of the plurality of pixels comprises a light emitting element, a selection TFT, a driver TFT, a reset TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, and a sensor reset TFT.

63. A semiconductor device according to claim 4, wherein each of the plurality of pixels comprises a light emitting element, a selection TFT, a driver TFT, a reset TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, and a sensor reset TFT.

64. A semiconductor device according to claim 6, wherein each of the plurality of pixels comprises a light emitting element, a selection TFT, a driver TFT, a reset TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, and a sensor reset TFT.

65. A semiconductor device according to claim 2 wherein each of the plurality of pixels comprises a light emitting element, a selection TFT, a driver TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, and a sensor reset TFT.

66. A semiconductor device according to claim 4, wherein each of the plurality of pixels comprises a light emitting element, a selection TFT, a driver TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, and a sensor reset TFT.

67. A semiconductor device according to claim 6, wherein each of the plurality of pixels comprises a light emitting element, a selection TFT, a driver TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, and a sensor reset TFT.

68. A semiconductor device according to claim 1, wherein each of the plurality of pixels comprises a liquid crystal element, a liquid crystal selection TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, a sensor reset TFT.

69. A semiconductor device according to claim 3, wherein each of the plurality of pixels comprises a liquid crystal element, a liquid crystal selection TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, a sensor reset TFT.

70. A semiconductor device according to claim 5, wherein each of the plurality of pixels comprises a liquid crystal element, a liquid crystal selection TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, a sensor reset TFT.

71. A semiconductor device according to claim 7, wherein each of the plurality of pixels comprises a liquid crystal element, a liquid crystal selection TFT, a photoelectric conversion element, a sensor selection TFT, a sensor driver TFT, a sensor reset TFT.

72. A semiconductor device according to claim 1, wherein each of the plurality of pixels comprises three light emitting elements and one photoelectric conversion element.

73. A semiconductor device according to claim 2, wherein each of the plurality of pixels comprises three light emitting elements and one photoelectric conversion element.

74. A semiconductor device according to claim 3, wherein each of the plurality of pixels comprises three light emitting elements and one photoelectric conversion element.

75. A semiconductor device according to claim 4, wherein each of the plurality of pixels comprises three light emitting elements and one photoelectric conversion element.

76. A semiconductor device according to claim 5, wherein each of the plurality of pixels comprises three light emitting elements and one photoelectric conversion element.

77. A semiconductor device according to claim 6, wherein each of the plurality of pixels comprises three light emitting elements and one photoelectric conversion element.

78. A semiconductor device according to claim 7, wherein each of the plurality of pixels comprises three light emitting elements and one photoelectric conversion element.

79. A display device using a semiconductor device according to claim 1.

80. A display device using a semiconductor device according to claim 2.

81. A display device using a semiconductor device according to claim 3.

82. A display device using a semiconductor device according to claim 4.

83. A display device using a semiconductor device according to claim 5.

84. A display device using a semiconductor device according to claim 6.

85. A display device using a semiconductor device according to claim 7.

86. A scanner using a semiconductor device according to claim 1.

87. A scanner using a semiconductor device according to claim 2.

88. A scanner using a semiconductor device according to claim 3.

89. A scanner using a semiconductor device according to claim 4.

90. A scanner using a semiconductor device according to claim 5.

91. A scanner using a semiconductor device according to claim 6.

92. A scanner using a semiconductor device according to claim 7.

93. A portable information terminal using a semiconductor device according to claim 1.

94. A portable information terminal using a semiconductor device according to claim 2.

95. A portable information terminal using a semiconductor device according to claim 3.

96. A portable information terminal using a semiconductor device according to claim 4.

97. A portable information terminal using a semiconductor device according to claim 5.

98. A portable information terminal using a semiconductor device according to claim 6.

99. A portable information terminal using a semiconductor device according to claim 7.

100. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels;

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a light emitting element portion, and

wherein the output switching circuit is connected to the sensor portion and to the light emitting element portion.

101. A semiconductor device comprising:

a pixel portion comprising a plurality of pixels

a signal line driver circuit; and

an output switching circuit,

wherein each of the plurality of pixels comprises a sensor portion and a liquid crystal element portion, and

wherein the output switching circuit is connected to the sensor portion and to the liquid crystal element portion.

102. A semiconductor device according to claim 100, wherein the output switching circuit comprises a first logical circuit and a second logical circuit, and one of the first logical circuit and the second logical circuit is connected to the sensor portion and the other is connected to the light emitting element portion.

103. A semiconductor device according to claim 101, wherein the output switching circuit comprises a first logical circuit and a second logical circuit, and one of the first logical circuit and the second logical circuit is connected to the sensor portion and the other is connected to the liquid crystal element portion.

104. A semiconductor device according to claim 100, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is a NOR circuit.

105. A semiconductor device according to claim 101, wherein one of the first logical circuit and the second logical circuit is an NAND circuit and the other is a NOR circuit.

106. A semiconductor device according to claim 100, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

107. A semiconductor device according to claim 101, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is a NOR circuit.

108. A semiconductor device according to claim 100, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

109. A semiconductor device according to claim 101, wherein one of the first logical circuit and the second logical circuit is a NAND circuit and the other is an OR circuit.

110. A semiconductor device according to claim 100, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an OR circuit.

111. A semiconductor device according to claim 101, wherein one of the first logical circuit and the second logical circuit is an AND circuit and the other is an OR circuit.

112. A semiconductor device according to claim 102, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

113. A semiconductor device according to claim 103, wherein an output terminal of the first logical circuit is connected to at least one inverter circuit.

114. A semiconductor device according to claim 102, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

115. A semiconductor device according to claim 103, wherein an output terminal of the second logical circuit is connected to at least one inverter circuit.

116. A display device using a semiconductor device according to claim 100.

117. A display device using a semiconductor device according to claim 101.

118. A scanner using a semiconductor device according to claim 100.

119. A scanner using a semiconductor device according to claim 101.

120. A portable information terminal using a semiconductor device according to claim 100.

121. A portable information terminal using a semiconductor device according to claim 101.